

What is claimed is:-

1. A flow meter comprising an inflow chamber having a first fluid inlet, an outflow chamber housed in the inflow chamber and having a second fluid inlet, which
5 is in fluid communication with the inflow chamber, and a fluid outlet by which fluid can drain from the outflow chamber, and a sensing device having an elongate sensor which is positioned at, or adjacent to and downstream of, the second fluid inlet, the second fluid inlet being of limited dimensions so that, in use, a head of fluid is formed in the inflow chamber and the flow rate of the fluid passing through the second fluid
10 inlet is monitored based on the extent of the elongate sensor which is covered by the fluid.
2. A flow meter as claimed in claim 1, wherein the elongate sensor is a wire sensor.
- 15 3. A flow meter as claimed in claim 1, wherein the elongate sensor is a strip sensor.
4. A flow meter as claimed in claim 1, wherein the outflow chamber comprises a
20 plurality of the said second fluid inlets and one said elongate sensor is positioned at, or adjacent to, each said second fluid inlet.
5. A flow meter as claimed in claim 1, wherein the or each second fluid inlet is

an elongate slit, which extends in the direction of the longitudinal extent of the outflow chamber.

6. A flow meter as claimed in claim 1, wherein the outflow chamber has spaced
5 parallel inner and outer surfaces between which a throughflow chamber is formed, the second fluid inlet(s) being formed in the inner surface and a third fluid inlet, through which fluid can enter the throughflow chamber, being formed adjacent to the bottom edge of the outer surface.

10 7. A flow meter as claimed in claim 1, wherein the outflow chamber includes a foam overflow inlet in its top surface which bypasses the or each elongate sensor.

8. A flow meter as claimed in claim 1, wherein the inflow chamber is frusto-conical, tapering in a downwards direction.

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9. A flow meter as claimed in claim 1, wherein the outflow chamber is frusto-conical, tapering in an upwards direction to, in use, encourage bubbles in the said fluid in the inflow chamber to move upwards to the surface of the fluid and not to pass through the second inlet.

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10. A flow meter as claimed in claim 1, wherein the first fluid inlet of the inflow chamber is positioned tangentially or substantially tangentially relative to the inner surface of the inflow chamber so that, in use, fluid flow follows a centrifugal spiral or

substantially spiral path on entering the inflow chamber.

11. A flow meter as claimed in claim 1, wherein a further elongate sensor is provided as a reference sensor which, in use, is entirely and continuously immersed in
5 the fluid.

12. A flow meter as claimed in claim 1, wherein the sensing device includes energising means for driving the or each elongate sensor, and electronic circuitry for monitoring the electrical characteristic of the or each elongate sensor.

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13. A flow meter as claimed in claim 12, wherein the electronic circuitry monitors the capacitive impedance, capacitance and/or conductance of the fluid based on the electrical response of the or each elongate sensor.

15 14. A flow meter as claimed in claim 11, wherein each elongate sensor is driven sequentially to prevent or limit interference therebetween.

15. A flow meter as claimed in claim 12, wherein the energising means outputs an alternating current, and the impedance of the sensing device is matched to that of the
20 fluid being monitored.